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PTO/SB/08A (8-00)

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 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 10

Complete If Known

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

U.S. PATENT DOCUMENTS					CLASS	SUBCLASS
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
W	A	08/751,188		Harrington, et al.	11/15/86	
W	B	60/038,760		Counter, et al.	02/20/87	
W	C	3,817,837		Tanenholz et al.	06-18-74	
W	D	3,860,752		Schuurs et al.	11-26-74	
W	E	3,999,350		Kronick et al.	02-17-76	
W	F	3,996,345		Ujman et al.	12-01-78	
W	G	4,275,149		Litman et al.	06-23-81	
W	H	4,277,437		Maggio	07-07-81	
W	I	4,368,241		Tom et al.	12-28-82	
W	J	4,883,195		Mullis et al.	07-28-87	
W	K	4,883,202		Mullis	07-28-87	
W	L	4,818,587		Cabilly et al.	03-28-89	
W	M	4,885,188		Mullis et al.	10-23-90	
W	N	5,489,508		West et al.	02-06-96	
W	O	5,583,018		Villeponteau et al.	12-10-98	
W	P	5,747,317		Cao	05-05-98	
W	Q	5,770,422		Collins	06-23-98	
W	R	8,093,809		Cech, et al.	07/25/00	
W	S	6,258,535	B1	Villeponteau et al.	07/10/01	
W	T	6,261,556	B1	Weinrich et al.	07/17/01	
W	U	6,261,838	B1	Cech et al.	07/17/01	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³	Number ⁴	Kind Code ⁵ (if known)		
W	V	JP	09154575-A			08-17-97
W	W	PCT	WO 84/03584			09-13-84
W	X	PCT	WO 85/13382			05-18-85
W	Y	PCT	WO 88/01835			01-25-88
W	Z	PCT	WO 88/12811			05-02-88
W	AA	PCT	WO 88/16580			06-27-88

Examiner Signature

W. W. W. W.

Date Considered

July 28, 2002

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet **2** of **10****Complete if Known**

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015889-002615US

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office ²	Number ⁴	Kind Code ⁵ (if known)				
<i>WJ</i>	AB	PCT	WO 96/40868			12-19-96		
<i>WJ</i>	AC	PCT	WO 98/01542			01-15-98		
<i>WJ</i>	AD	PCT	WO 98/01543			01-15-98		
<i>WJ</i>	AE	PCT	WO 98/07838			03-05-98		
<i>WJ</i>	AF	PCT	WO 98/08938			02-26-98		
<i>WJ</i>	AG	PCT	WO 98/21343			05-22-98		
<i>WJ</i>	AH	PCT	WO 98/37181			08-27-98		
<i>WJ</i>	AI	PCT	WO 98/46450			10-15-98		
<i>WJ</i>	AJ	PCT	WO 98/59040			12/30/98		
<i>WJ</i>	AK	PCT	WO 98/01560			01/14/99		

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Signature*WJ*Date
Considered*July 29, 2002*

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**INFORMATION DISCLOSURE
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Sheet **3** of **10****Complete if Known**

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	2
dm	AL	1994 Genome Issue of Science (265:1991f)	
dm	AM	Anderson and Young, "Quantitative Filter Hybridization" in <i>Nucleic Acid Hybridization</i> pp73-111 (1985)	
dm	AN	Ausubel et al., <i>Current Protocols in Molecular Biology</i> , John Wiley & Sons, New York NY (1989)	
dm	AO	Autexier et al., "Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA," (1998) <i>EMBO J</i> , 16:5928	
dm	AP	Autexier and Greider, "Functional reconstitution of wild-type and mutant <i>Tetrahymena</i> telomerase," (1994) <i>Genes Develop.</i> , 8:583	
dm	AQ	Berger and Kimmel, <i>Guide to Molecular Cloning Techniques</i> , Meth. Enzymol., vol. 152, Academic Press, San Diego CA (1987)	
dm	AR	Bieseman et al., "Addition of Telomere-Associated HeT DNA Sequences "Heals" Broken Chromosome Ends in <i>Drosophila</i> ," (1990) <i>Cell</i> , 61:983	
dm	AS	Blitter et al., "Expression and secretion vectors for yeast," <i>Meth Enzymol.</i> , (1987) 153:516	
dm	AT	Blackburn and Chlou, "Non-nucleosomal packaging of a tandemly repeated DNA sequence at termini of extrachromosomal DNA coding for rRNA in <i>Tetrahymena</i> ," (1981) <i>Proc. Natl. Acad. Sci.</i> , 78:2263	
dm	AU	Blackburn and Gall, "A tandemly repeated sequence at the termini of the extrachromosomal ribosomal RNA genes in <i>Tetrahymena</i> ," (1978) <i>J. Mol. Biol.</i> , 120:33	
dm	AV	Blackburn, "Telomerases," (1992) <i>Ann. Rev. Biochem.</i> , 61:113	
dm	AW	Bodnar et al., "Extension of Life-Span by Introduction of Telomerase into Normal Human Cells," (1998) <i>Science</i> , 279:349	
dm	AX	Bradford, "A Rapid and Sensitive method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding," (1976) <i>Anal. Biochem.</i> , 72:248	
dm	AY	Braunstein et al., "Transcriptional silencing in yeast is associated with reduced nucleosome acetylation," (1993) <i>Genes Develop.</i> , 7:592	

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**INFORMATION DISCLOSURE
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Sheet 4 of 10

Complete if Known

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	2
dw	AZ	Calvo et al., "Identification of hnRNP P2 as TLS/FUS using electrospray mass spectrometry," (1995) <i>RNA</i> , 1:724	
dw	BA	Caruthers et al., "New chemical methods for synthesizing polynucleotides," (1980) <i>Nucleic Acids Res. Symp. Ser.</i> , 215-223	
dw	BB	Chan and Tye, "Organization of DNA sequences and replication origins at yeast telomeres," (1983) <i>Cell</i> , 33:663	
dw	BC	Colbere-Garapin et al., "A new dominant hybrid selective marker for higher eukaryotic cells," (1981) <i>J. Mol. Biol.</i> , 150:1	
dw	BD	Cole et al., "The EBV-hybridoma technique and its application to human lung cancer," <i>Monoclonal Antibodies and Cancer Therapy</i> , Alan R. Liss Inc., New York NY 77-86 (1985)	
dw	BE	Collins et al., "Purification of Tetrahymena telomerase and cloning of genes encoding the two protein components of the enzyme," (1995) <i>Cell</i> , 81:877	
dw	BF	Conrad et al., "RAP1 protein interacts with yeast telomeres in vivo: Overproduction alters telomere structure and decreases chromosome stability," (1990) <i>Cell</i> , 63:739	
dw	BG	Coombs, <i>Dictionary of Biotechnology</i> , Stockton Press, New York NY (1994)	
dw	BH	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," (1983) <i>Proc. Natl. Acad. Sci.</i> , 80:2026	
dw	BI	Counter et al., "The catalytic subunit of yeast telomerase," (1997) <i>Proc. Natl. Acad. Sci.</i> , 94:9202	
dw	BJ	Counter et al., (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:2900	
dw	BK	Creighton, <i>Proteins, Structures and Molecular Principles</i> , WH Freeman and Co, New York, NY (1983)	
dw	BL	Dioffonbach and Dvorkesler, <i>PCR Primer, a Laboratory Manual</i> , Cold Spring Harbor Press, Plainview NY (1995)	

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1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 5 of 10**Complete if Known**

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	2
dnr	BM	Duplaa et al., "Quantitative analysis of polymerase chain reaction products using biotinylated dUTP incorporation," (1993) <i>Anal. Biochem.</i> , 212:228	
dnr	BN	Fang et al., "Oxytricha telomere-binding protein: separable DNA-binding and dimerization domains of the α -subunit," <i>Genes Develop.</i> 7:870 (1993) and Gray et al., (1991) <i>Cell</i> 67:807	
dnr	BO	Feng et al., "The RNA Component of Human Telomerase," (1996) <i>Science</i> , 269:1236	
dnr	BP	GenBank Accession No. AA281286 (April 1997)	
dnr	BQ	Genbank accession no. AA289878 (April 1997)	
dnr	BR	Genbank accession no. AA311750 (April 1997)	
dnr	BS	Gilley et al., "Altering specific telomerase RNA template residues affects active site function," (1995) <i>Genes Develop.</i> , 9:2214	
dnr	BT	Gottesching and Cech, "Chromatin Structure of the Molecular Ends of Oxytricha Mononuclear DNA: Phased Nucleosomes and a Telomeric Complex," (1984) <i>Cell</i> , 38:501	
dnr	BU	Gottesching and Zaldan, "Telomere proteins: specific recognition and protection of the natural termini of Oxytricha macronuclear DNA," (1986) <i>Cell</i> 47:195	
dnr	BV	Grant et al., <i>Meth Enzymol.</i> , (1987) 153:516-544	
un	BW	Greenwood et al., "Phylogenetic relationships within the class oligohymenophorea, phylum ciliophora, inferred from the complete small subunit rRNA gene sequences of <i>Colpodium campyllum</i> , <i>Glaucoma chattoni</i> , and <i>Opisthoxeca henneguyi</i> ," (1991) <i>J. Mol. Evol.</i> , 3:163	
dnr	BX	Greider and Blackburn, "A telomeric sequence in the RNA of Tetrahymena telomerase required for telomere repeat synthesis," (1989) <i>Nature</i> , 337:331	
un	BY	Greider and Blackburn, "Identification of a specific telomere terminal transferase activity in Tetrahymena extracts," (1985) <i>Cell</i> , 43:405	

Examiner
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**INFORMATION DISCLOSURE
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Sheet 6 of 10**Complete if Known**

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
dmf	BZ	Greider, "Telomerase is processive," (1991) <i>Mol. Cell. Biol.</i> , 11:4572
dmf	CA	Greider, "Telomere Length Regulation," (1996) <i>Ann. Rev. Biochem.</i> , 65:337
dmf	CB	Hampton et al., <i>Serological Methods a Laboratory Manual</i> , APS Press, St Paul MN (1990)
dmf	CC	Harrington et al., "A Mammalian Telomerase-Associated Protein," (1997) <i>Science</i> , 275:973
dmf	CD	Harrington et al., "Human telomerase contains evolutionarily conserved catalytic and structural subunits," (1997) <i>Genes Dev.</i> , 11:3109
dmf	CE	Hartman and Mulligan, "Two dominant-acting selectable markers for gene transfer studies in mammalian cells," (1988) <i>Proc. Natl. Acad. Sci.</i> , 85:8047
dmf	CF	Henderson and Blackburn, "An overhanging 3' terminus is a conserved feature of telomeres," (1988) <i>Mol. Cell. Biol.</i> , 9:345
dmf	CG	Horn et al., "Synthesis of oligonucleotides on cellulose. Part II: design and synthetic strategy to the synthesis of 22 oligodeoxynucleotides coding for gastric inhibitory polypeptide (GIP)," (1980) <i>Nucleic Acids Res. Symp. Ser.</i> , 225-232
dmf	CH	Hudson et al., "An STS-based map of the human genome," (1995) <i>Science</i> , 270:1945
dmf	CI	Huse et al., "Generation of a large combinatorial library of the immunoglobulin repertoire in phage lambda," (1989) <i>Science</i> , 246:1275
dmf	CJ	Johnson et al., (1991) <i>Mol. Cell Biol.</i> 11:1
dmf	CK	Klijan et al., "Isolation of a candidate human telomerase catalytic subunit gene, which reveals complex splicing patterns in different cell types," (1997) <i>Hum. Mol. Genet.</i> , 6:2011
dmf	CL	Kipling and Cooke, "Hypervariable ultra-long telomeres in mice," (1990) <i>Nature</i> 347:400
dmf	CM	Klobutcher et al., "All gene-sized DNA molecules in four species of hypotrichs have the same terminal sequence and an unusual 3' terminus," (1981) <i>Proc. Natl. Acad. Sci.</i> , 78:3015

Examiner
Signature*dmf*Date
Considered

July 25, 2002

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**INFORMATION DISCLOSURE
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Sheet **5** of **10****Complete if Known**

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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dw	BM	Duplaa et al., "Quantitative analysis of polymerase chain reaction products using biotinylated dUTP incorporation," (1993) <i>Anal. Biochem.</i> , 212:229	
dw	BN	Fang et al., "Oxytricha telomere-binding protein: separable DNA-binding and dimerization domains of the α -subunit," <i>Genes Develop.</i> 7:870 (1993) and Gray et al., (1991) <i>Cell</i> 67:807	
dw	BO	Fang et al., "The RNA Component of Human Telomerase," (1995) <i>Science</i> , 269:1236	
dw	BP	GenBank Accession No. AA281296 (April 1997)	
dw	BQ	Genbank accession no. AA289878 (April 1997)	
dw	BR	Genbank accession no. AA311750 (April 1997)	
dw	BS	Gilley et al., "Altering specific telomerase RNA template residues affects active site function," (1995) <i>Genes Develop.</i> , 9:2214	
dw	BT	Gottschling and Cech, "Chromatin Structure of the Molecular Ends of Oxytricha Mononuclear DNA: Phased Nucleosomes and a Telomeric Complex," (1984) <i>Cell</i> , 38:501	
dw	BU	Gottschling and Zaldan, "Telomere proteins: specific recognition and protection of the natural termini of Oxytricha macronuclear DNA," (1986) <i>Cell</i> 47:195	
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dw	BX	Greider and Blackburn, "A telomeric sequence in the RNA of Tetrahymena telomerase required for telomere repeat synthesis," (1989) <i>Nature</i> , 337:331	
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M. Alvdor

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July, 28, 2002

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 4 of 10

Complete if Known

Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
dw	AZ	Calvo et al., "Identification of hnRNP P2 as TLS/FUS using electrospray mass spectrometry," (1995) RNA, 1:724
dw	BA	Caruthers et al., "New chemical methods for synthesizing polynucleotides," (1980) Nucleic Acids Res. Symp. Ser., 215-223
dw	BB	Chan and Tye, "Organization of DNA sequences and replication origins at yeast telomeres," (1983) Cell, 33:583
dw	BC	Colbere-Garapin et al., "A new dominant hybrid selective marker for higher eukaryotic cells," (1981) J. Mol. Biol., 150:1
dw	BD	Cole et al., "The EBV-hybridoma technique and its application to human lung cancer," Monoclonal Antibodies and Cancer Therapy, Alan R. Liss Inc., New York NY 77-86 (1985)
dw	BE	Collins et al., "Purification of Tetrahymena telomerase and cloning of genes encoding the two protein components of the enzyme," (1995) Cell, 81:877
dw	BF	Conrad et al., "RAP1 protein interacts with yeast telomeres in vivo: Overproduction alters telomere structure and decreases chromosome stability," (1990) Cell, 63:739
dw	BG	Coombs, Dictionary of Biotechnology, Stockton Press, New York NY (1994)
dw	BH	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," (1983) Proc. Natl. Acad. Sci., 80:2026
dw	BI	Counter et al., "The catalytic subunit of yeast telomerase," (1997) Proc. Natl. Acad. Sci., 94:9202
dw	BJ	Counter et al., (1994) Proc. Natl. Acad. Sci., 91:2900
dw	BK	Creighton, Proteins, Structures and Molecular Principles, WH Freeman and Co, New York, NY (1983)
dw	BL	Diafionbach and Dvorkin, PCR Primer, a Laboratory Manual, Cold Spring Harbor Press, Plainview NY (1995)

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Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

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df	BZ	Greider, "Telomerase is processive," (1991) <i>Mol. Cell. Biol.</i> , 11:4572	
df	CA	Greider, "Telomere Length Regulation," (1996) <i>Ann. Rev. Biochem.</i> , 65:337	
df	CB	Hampton et al., <i>Serological Methods a Laboratory Manual</i> , APS Press, St Paul MN (1990)	
df	CC	Harrington et al., "A Mammalian Telomerase-Associated Protein," (1997) <i>Science</i> , 275:973	
df	CD	Harrington et al., "Human telomerase contains evolutionarily conserved catalytic and structural subunits," (1997) <i>Genes Dev.</i> , 11:3109	
df	CE	Hartman and Mulligan, "Two dominant-acting selectable markers for gene transfer studies in mammalian cells," (1988) <i>Proc. Natl. Acad. Sci.</i> , 85:8047	
df	CF	Henderson and Blackburn, "An overhanging 3' terminus is a conserved feature of telomeres," (1988) <i>Mol. Cell. Biol.</i> , 8:345	
df	CG	Horn et al., "Synthesis of oligonucleotides on cellulose. Part II: design and synthetic strategy to the synthesis of 22 oligodeoxynucleotides coding for gastric inhibitory polypeptide (GIP)," (1980) <i>Nucleic Acids Res. Symp. Ser.</i> , 225-232	
df	CH	Hudson et al., "An STS-based map of the human genome," (1995) <i>Science</i> , 270:1945	
df	CI	Huse et al., "Generation of a large combinatorial library of the immunoglobulin repertoire in phage lambda," (1989) <i>Science</i> , 246:1275	
df	CJ	Johnson et al., (1981) <i>Mol. Cell Biol.</i> 1:1	
df	CK	Klian et al., "Isolation of a candidate human telomerase catalytic subunit gene, which reveals complex splicing patterns in different cell types," (1997) <i>Hum. Mol. Genet.</i> , 6:2011	
df	CL	Kipling and Cooke, "Hypervariable ultra-long telomeres in mice," (1990) <i>Nature</i> 347:400	
df	CM	Klobutcher et al., "All gene-sized DNA molecules in four species of hypotrichs have the same terminal sequence and an unusual 3' terminus," (1981) <i>Proc. Natl. Acad. Sci.</i> , 78:3015	

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Application Number	09/721,456
Filing Date	November 22, 2000
First Named Inventor	Cech, Thomas J.
Group Art Unit	1651
Examiner Name	To Be Assigned
Attorney Docket Number	015389-002615US

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Examiner Initials *	Cite No. †	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
der	CN	Koehler and Milstein, "Continuous cultures of fused cells secreting antibody of predefined specificity," (1975) <i>Nature</i> 258:495
der	CO	Kosbor et al., "The production of monoclonal antibodies from human lymphocytes," (1983) <i>Immunol. Today</i> 4:72
der	CP	Lamond and Sproat, (1994) "Isolation and Characterization of Ribonucleoprotein Complexes," pp103-140
der	CQ	Lamond et al., "Probing the structure and function of U2 snRNP with antisense oligonucleotides made of 2'-OMe RNA," (1989) <i>Cell</i> , 58:383
der	CR	Lendvay et al., "Senescence mutants of <i>Saccharomyces cerevisiae</i> with a defect in telomere replication identify three additional EST genes," (1996) <i>Genetics</i> , 144
der	CS	Lingner et al., "Purification of telomerase from <i>Euphotes adeiculatus</i> : requirement of a primer 3' overhang," (1998) <i>Proc. Natl. Acad. Sci.</i> , 95:10712
der	CT	Lingner et al., "Reverse transcriptase motifs in the catalytic subunit of telomerase," (1987) <i>Science</i> , 278:661
der	CU	Lingner et al., "Telomerase RNAs of different ciliates have a common secondary structure and a permuted template," (1994) <i>Genes Develop.</i> , 8:1084
der	CV	Lingner et al., "Telomerase and DNA End Replication: No Longer a Lagging Strand Problem?," (1995) <i>Science</i> 269:1533
der	CW	Lowy et al., "Isolation of transforming DNA: Cloning the hamster apt gene," (1980) <i>Cell</i> , 22:617
der	CX	Lustig and Peles, "Identification of yeast mutants with altered telomere structure," (1986) <i>Proc. Natl. Acad. Sci.</i> , 83:1398
der	CY	Maddox et al., "Elevated serum levels in human pregnancy of a molecule immunohistochemically similar to eosinophil granule major basic protein," (1983) <i>J. Exp. Med.</i> , 158:1211
der	CZ	Mekary et al., "Nucleosomal Organization of Telomere-Specific Chromatin in Rat," (1993) <i>Cell</i> , 73:775
der	DA	McEachern and Blackburn, "runaway telomere elongation caused by telomerase RNA gene mutation," (1995) <i>Nature</i> , 376:403

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/721,456
		Filing Date	November 22, 2000
		First Named Inventor	Cech, Thomas J.
		Group Art Unit	1651
		Examiner Name	To Be Assigned
		Attorney Docket Number	015389-002615US
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dlw	DB	Melby et al., "Quantitative measurement of human cytokine gene expression by polymerase chain reaction," (1993) <i>J. Immunol. Meth.</i> , 159:235	
dlw	DC	Merrifield, "Solid phase peptide synthesis. I. The synthesis of a tetrapeptide," (1963) <i>J. Am. Chem. Soc.</i> , 85:2149	
dlw	DD	Meyerson et al., "hEST2, the Putative Human Telomerase Catalytic Subunit Gene, is Up-Regulated in Tumor Cells and during Immortalization," (1997) <i>Cell</i> , 90:795	
dlw	DE	Murray, in <i>McGraw Hill Yearbook of Science and Technology</i> , (1992) McGraw Hill, New York NY, pp 181-186	
dlw	DF	Nakamura et al., "Telomerase Catalytic Subunit Homologs from Fission Yeast and Human," (1997) <i>Science</i> , 277:955	
dlw	DG	Nakayama et al., "TLP1: A Gene Encoding a Protein Component of Mammalian Telomerase is a Novel Member of WD Repeats Family," (1997) <i>Cell</i> , 88:875	
dlw	DH	Nielsen et al., (1993) "Peptide nucleic acids (PNAs): Potential antisense and anti-gene agents," <i>Anticancer Drug Des.</i> , 8:53	
dlw	DI	Oka et al., "Inverted terminal repeat sequence in the macronuclear DNA of <i>Stylonychia pustulata</i> ," (1980) <i>Gene</i> , 10:301	
dlw	DJ	Olovnikov, "A theory of marginotomy: The incomplete copying of template margin in enzymic synthesis of polynucleotides and biological significance of the phenomenon," (1973) <i>J. Theor. Biol.</i> , 41:181	
dlw	DK	Orlandi et al., "Cloning immunoglobulin variable domains for expression by the polymerase chain reaction," (1989) <i>Proc. Natl. Acad. Sci.</i> , 86:8833	
dlw	DL	Prescott, "The DNA of ciliated protozoa," (1994) <i>Microbiol. Rev.</i> , 58:233	
dlw	DM	Price, (1993) <i>Blood Rev.</i> , 7:127	
dlw	DN	Rhodes et al., "Transformation of maize by electroporation of embryos," (1995) <i>Meth. Mol. Biol.</i> , 55:121	
dlw	DO	Roberge et al., "A strategy for a convergent synthesis of N-linked glycopeptides on a solid support," (1995) <i>Science</i> , 269:202	
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**INFORMATION DISCLOSURE
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Sheet

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def	DP	Romero and Blackburn, "A conserved secondary structure for telomerase RNA," (1991) <i>Cell</i> , 67:343
def	DQ	Sambrook et al., <i>Molecular Cloning, A Laboratory Manual</i> , Cold Spring Harbor Press, Plainview NY (1989)
def	DR	Sandell et al., "Transcription of yeast telomere alleviates telomere position effect without affecting chromosome stability," (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:12081
def	DS	Sanger et al., "DNA sequencing with chain-terminating inhibitors," (1977) <i>Proc. Natl. Acad. Sci.</i> , 74:5463
def	DT	Scharf et al., "Heat stress promoters and transcription factors," (1994) <i>Resul Probl. Cell Differ.</i> 20:125
def	DU	Shampay and Blackburn, "Generation of telomere-length heterogeneity in <i>Saccharomyces cerevisiae</i> ," (1988) <i>Proc. Natl. Acad. Sci.</i> , 85:534
def	DV	Sheen and Levis, "Transposition of the LINE-like retrotransposon TART to <i>Drosophila</i> chromosome termini," (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:12510
def	DW	Singer and Gottschling, "TLC1: Template RNA Component of <i>Saccharomyces cerevisiae</i> Telomerase," (1994) <i>Science</i> 266:404
def	DX	Starling et al., "Extensive telomere repeat arrays in mouse are hypervariable," (1990) <i>Nucleic Acids Res.</i> , 18:6881
def	DY	Swanton et al., "Arrangement of Coding and Non-coding Sequences in the DNA Molecules Coding for rRNAs in <i>Oxytricha</i> sp.," (1989) <i>Chromosoma</i> 77:203
def	DZ	Tommerup et al., "Unusual chromatin in human telomeres," (1994) <i>Mol. Cell. Biol.</i> , 14:5777
def	EA	Trask, "Fluorescence in situ hybridization: application in cytogenetics and gene mapping," (1991) <i>Trends Genet.</i> , 7:149
def	EB	Verma et al., <i>Human Chromosomes: A Manual of Basic Techniques</i> , Pergamon Press, New York NY (1988)
def	EC	Watson, "Origin of concatameric T7 DNA," (1972) <i>Nature New Biol.</i> , 239:197

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Sheet **10** of **10****Complete if Known**

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dlf	ED	Welnich <i>et al.</i> , "Reconstitution of human telomerase with the template RNA component hTR and the catalytic protein subunit hTRT," (1997) <i>Nat. Genet.</i> , 17(4):498	
dlf	EE	Wellinger <i>et al.</i> , "Origin activation and formation of single-strand TG ₁₋₃ tails occur sequentially in late S phase on a Yeast linear plasmid," (1993) <i>Mol. Cell. Biol.</i> , 13:4057	
dlf	EF	Wellinger <i>et al.</i> , "Saccharomyces Telomeres Acquire Single-Strand TG ₁₋₃ Tails Late in S Phase," (1993) <i>Cell</i> 72:51	
dlf	EG	Whitehead Institute/MIT Center for Genome Research, Genetic Map of the Mouse, Database Release 10, April 28, 1995	
dlf	EH	Wigler <i>et al.</i> , "Transfer of purified herpes virus thymidine kinase gene to cultured mouse cells," (1977) <i>Cell</i> , 11:229	
dlf	EI	Wigler <i>et al.</i> , "Transformation of mammalian cells with an amplifiable dominant-acting gene," (1980) <i>Proc. Natl. Acad. Sci.</i> , 77:3587	
dlf	EJ	Winter and Milstein, "Man-made antibodies," (1981) <i>Nature</i> , 348:293	
dlf	EK	Wright <i>et al.</i> , "Saccharomyces telomeres assume a non-nucleosomal chromatin structure," (1992) <i>Genes Develop.</i> , 6:167	
dlf	EL	Yu <i>et al.</i> , "In vivo alteration of telomere sequences and senescence caused by mutated Tetrahymena telomerase RNAs," (1990) <i>Nature</i> , 344:128	
dlf	EM	Zahler and Prescott, "Telomere terminal transferase activity in the hypotrichous ciliate <i>Oxytricha nova</i> and a model for replication of the ends of linear DNA molecules," (1988) <i>Nucleic Acids Res.</i> , 16:6953	
dlf	EN	Zakian, Telomeres: Beginning to Understand the End," (1995) <i>Science</i> 270:1601	
dlf	EO	Zaug <i>et al.</i> , "Catalysis of RNA Cleavage by a Ribozyme Derived from the Group I Intron of Aneurospora Pro-IRNA ¹⁵⁴⁴ "	

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